

TRAFFIC MANAGEMENT in OAKLAND COUNTY

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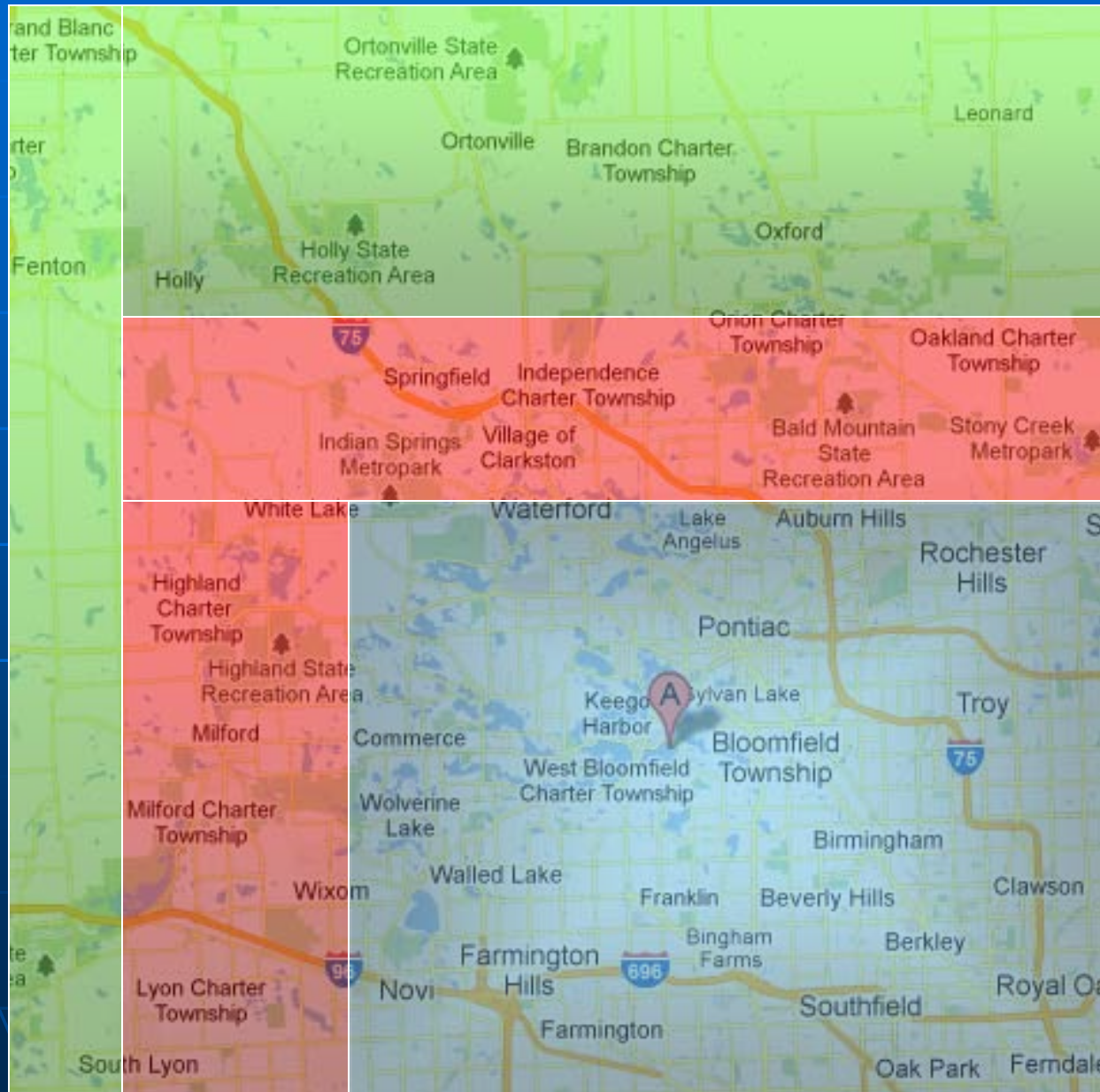


AGENDA

- Background on Oakland County
- Signal Ownership
- Need for Improved Signal Operations
- Signal Management in Oakland County
- Funding

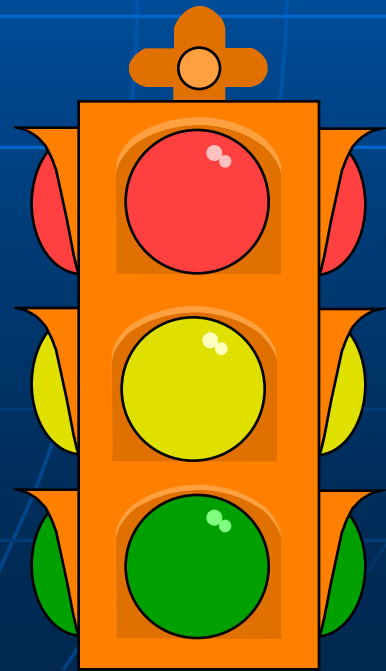


OAKLAND COUNTY, MI



Signal Ownership/Maintenance

- Road approach jurisdiction determines who owns a traffic signal
- Signal costs split by approach ownership (capital and maintenance)
- In urban areas most Road Commissions maintain traffic signals for MDOT and other locals
- By default, most operational issues are also taken on by Road Commissions



RCOC Signal Maintenance

- Maintain about 1300 traffic signals and another 300 electrical devices
- Distribution:
 - MDOT 350
 - Locals 275
 - RCOC 675
- There are another 200 signals in the County that are not maintained by RCOC



COMPELLING NEED

- n Accommodate Population and Economic Growth
- n To Offset \$1.9 Billion in Unmet Road Improvement Requirements
- n Widening Difficult and Costly
 - ROW costs
 - Environmental issues
- n Lack of Advanced Signal Systems



GOALS

- n Safety, Reduce Accidents
- n Improve Traffic Flow
 - Limited geometric improvements
- n Respond Quicker to Motorist Concerns
- n Work with Locals to Improve Event Management
 - Sports
 - Malls
 - Freeway incident spillover



TRAFFIC SYSTEM NEEDS

- n Reduce Accidents
- n Adjust to Changing Volumes
- n Special Events
- n Expandable
- n Versatile
 - Corridors/grids/isolated
 - Volumes
 - Geometrics
 - Operations

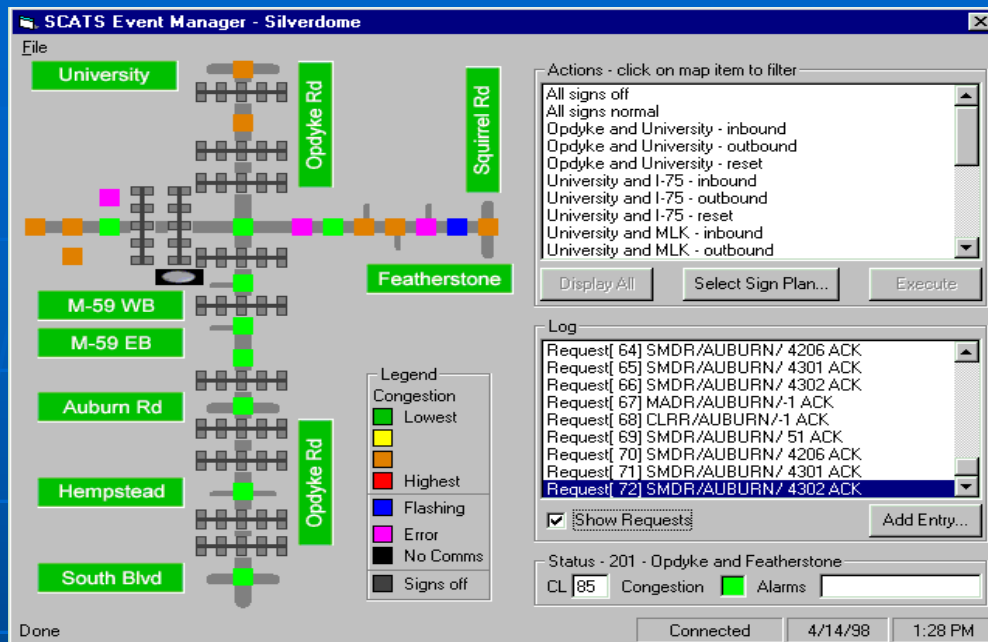


SCATS TRAFFIC SIGNALS

- n Adaptive
 - Adjust signal timings in real-time based on actual volumes
- n Continuous Signal Timing Updates
- n Central Monitoring
- n Un-usual Congestion Management
- n Special Event Management



SCATS EVENT MANAGER

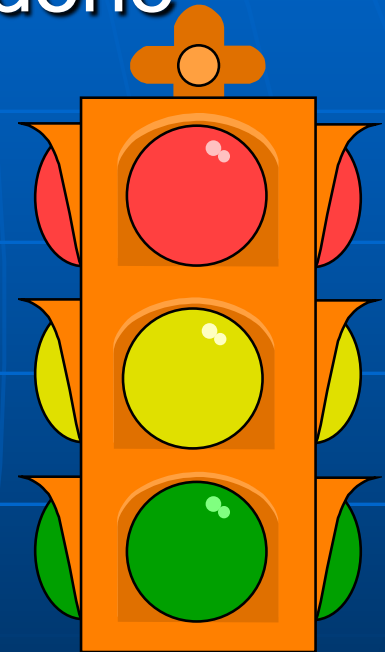


SIGNAL RETIMING



CLEAR PROJECT NEEDS

- Nearly 900 non-SCATS signals
- No comprehensive re-timing ever done
 - Cycle lengths, splits, and offsets
 - Peak periods
 - Clearance intervals
- Dramatic volume changes
- Pattern shifts
- Many new signals along corridors
- Minimal resources to maintain timings



COUNTY-WIDE SIGNAL RETIMING PROJECT

- Included all non-SCATS traffic signals (including ones not maintained by RCOC)
- Further reduced boundary issues
- Standardized clearance intervals
- Greatly Improved overall traffic flow county-wide
- Done with 100% CMAQ funds



FUNDING

n Capital

- Earmarks
- CMAQ
- Safety
- Construction Projects
- RCOC Signal Program
- MDOT/Locals/Private



n Operations and Maintenance

- CMAQ (SCATS components)
- RCOC funds
- MDOT/Locals/Private

